Office Action Summary	Application No.	Applicant(s)	
	10/527,755	KIM, SANG-JIN	
	Examiner	Art Unit	
	Bernard Rojas	2832	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 October 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *31-60* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *31-48 and 50-60* is/are rejected.

7)☒ Claim(s) *49* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 10/26/2007 have been fully considered but they are not persuasive.

Claims 31-42, Applicant states that Hiroyoshi et al. fails to teach that the elastic unit is directly fixed and supported with the case. In response, Hiroyoshi et al. teaches that the spring is supported by both a casing and a spring frame. It would have been obvious to one of ordinary skill in the art at the time the invention was made to construct the frame and case as one piece, since it has been held that forming in one piece an article which has formerly been formed in to pieces and put together involves only routine skill in the art. *Howard v. Detroit Stove Works*, 150 U.S. 164.

Claims 43-54, Applicant states that Hiroyoshi et al. fails to teach that a distance between a side surface of the weight and a side surface of the casing body is smaller than a distance between an upper surface of the weight and the upper surface of the casing body. In response, Hiroyoshi et al. discloses the claimed invention, the frame 210 is considered to be the side of the casing [figure 1], weight 120 includes magnet [110], as per the claim language. Therefore, the space between the weight 110/120 and side casing 210 is smaller than the space between 110/120 and the upper casing 410.

Claims 55-58, Applicant states that Hiroyoshi et al. fails to teach that an elastic unit is directly fixed with the casing body and the weight at a direct fixing portion on the elastic unit. In response, Hiroyoshi et al. discloses an elastic unit [310] configured to

support the weight elastically and directly fixed with the casing body [at side surface 210] and the weight at a direct fixing portion [311] of the elastic unit [figure 1].

Claims 59-60, Applicant states that Sakai fails to teach that the 3-dimensional elastic unit is directly fixed and supported with the case and the lower cover. In response, Sakai figure 1B discloses a case [12] with an upper cover [9] and lower cover [lower portion of 12 opposite 9] covers formed above and below the case to protect inner components between the upper and lower covers. The lower cover is part of the casing, therefore the 3-dimensional elastic unit is directly fixed and supported with the case and the lower cover

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 43, 46-48, 50-55 and 58 are rejected under 35 U.S.C. 102(b) as being anticipated by Hiroyoshi et al. [US 5,682,132]

Claim 43, Hiroyoshi et al. discloses a vibration device [figure 1] comprising: a casing body including an upper surface [410] a lower surface [420] and a side surface

[210]; a weight [120/110] including at least one magnet [110] disposed in the casing body; at least one elastic unit [310] configured to support the weight elastically, and contacted with the casing body; a magnetic force generating unit [220] configured to generate a magnetic force to vibrate the weight in the casing body, wherein a distance between a side surface of the weight [120,110] and a side surface [210] of the casing body is smaller than a distance between an upper surface of the weight [110,120] and the upper surface of the casing body [410].

Claim 46, Hiroyoshi et al. discloses the vibration device according to claim 43, wherein the at least one elastic unit includes a strip of a closed-curve shape and a plurality of support legs extended from the strip, the strip being connected to the weight and the plurality of support legs being connected to the casing body such that the weight is suspended in the casing body [figures 3, 8 and 10-12].

Claim 47, Hiroyoshi et al. discloses the vibration device according to claim 43, further comprising a fixing member [210] attached to the casing body and configured to support the at least one elastic unit [figure 1].

Claim 48, Hiroyoshi et al. discloses the vibration device according to claim 47, wherein the fixing member is contacted with the upper surface, the lower surface and the side surface of the casing body [figure 1].

Claim 50, Hiroyoshi et al. discloses the vibration device according to claim 43, wherein the strip has a polygonal or circular shape [figures 3, 8 and 10-12].

Claim 51, Hiroyoshi et al. discloses the vibration device according to claim 43, wherein the at least one elastic unit is a coil spring of a circular or polygonal conical shape [figure 9].

Claim 52, Hiroyoshi et al. discloses the vibration device according to claim 43, wherein the magnet is formed on only one surface of the weight opposite to the magnetic force generating unit [figure 1].

Claim 53, Hiroyoshi et al. discloses the vibration device according to claim 43, wherein the magnetic force generating unit is a coil [220].

Claim 54, Hiroyoshi et al. discloses the vibration device according to claim 43, wherein the at least one elastic unit includes at least two elastic units [figure 1], and wherein elastic unit insert grooves [groove between 120 and 130] are formed on the upper and lower surfaces of the weight so that the at least two elastic units are inserted and fixed therein respectively.

Claim 55, Hiroyoshi et al. discloses a vibration device [figure 1] comprising: a casing body including an upper surface [410], a lower surface [420] and a side surface [210]; a weight [120] including at least one magnet [110] disposed in the casing body; an elastic unit [310] configured to support the weight elastically and directly fixed with the casing body [at 210] and the weight at a direct fixing portion [311] of the elastic unit; and a magnetic force generating unit [220] configured to generate a magnetic force to vibrate the weight in the casing body, wherein the magnetic force generating unit, the direct fixing portion of the elastic unit and the casing body are formed on a same horizontal plane [figure 1].

Claim 58, Hiroyoshi et al. discloses the vibration device according to claim 55, wherein the magnet and the contact portion of the elastic unit and the weight are formed on a same horizontal plane [figure 1].

Claims 59 and 60 are rejected under 35 U.S.C. 102(b) as being anticipated by Sakai [US 6,850,138].

Claim 59, Sakai discloses a vibration device [figure 1B] comprising: a case [12]; terminal plate attached to one side of the case and connected to an external power source; a vibrating plate [3] disposed in an upper portion of the case; a voice coil [5] disposed below the vibrating plate; a magnetic force generator [1, 2] formed below the voice coil; a 3-dimensional elastic unit [5] for elastically supporting the magnetic force generator; and upper [9] and lower [lower portion of 12 opposite 9] covers formed above and below the case to protect inner components between the upper and lower covers, wherein the 3-dimensional elastic unit is directly fixed and supported with the case and the lower cover [figure 1B].

Claim 60, Sakai discloses the vibration device according to claim 59, wherein the magnetic force generator comprises: a magnet [2]; a yoke [1] formed to surround the magnet; and a plate seated upon the yoke.

Claim Rejections - 35 USC § 103

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 44 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hiroyoshi et al. [US 5,682,132].

Claims 44 and 45, Hiroyoshi et al. discloses the vibration device according to claim 31, Hiroyoshi et al. discloses the claimed invention except for the at least one elastic unit is directly contacted and supported with the lower or upper surface. It would have been obvious to one having ordinary skill in the art at the time the invention was made to exchange the shapes of the upper and lower cases [to construct the lower case in a C-shape with a flat upper case instead of the disclosed C-shaped upper case with a flat lower case], since it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70.

Claims 31-42, 56 and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hiroyoshi et al. [US 5,682,132] in view of Applicant's Admitted Prior Art [AAPA] figure 1.

Claim 31, Hiroyoshi et al. discloses a vibration device [figure 1] comprising: upper [410] and lower [420] cases combined with each other to form a case; a magnetic force generating unit [220] provided on at least one surface of the upper and lower cases [figure 1]; at least one magnet [110] formed to be opposite to the magnetic force generating unit; a weight [120] combined with the at least one magnet; and at least one elastic unit [310] configured to support the weight elastically, wherein the at least one elastic unit is contacts and support with the case [by fixing means frame 210].

Hiroyoshi et al. fails to teach that the elastic unit is directly fixed and supported with the case.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to construct the frame and case as one piece, since it has been held that forming in one piece an article which has formerly been formed in to pieces and put together involves only routine skill in the art. *Howard v. Detroit Stove Works*, 150 U.S. 164.

Hiroyoshi et al. fails the claimed location of the magnetic force generating unit, wherein it is provided across from at least one of a lower side and an upper side of the weight to accommodate the weight extending in a circumferential direction.

AAPA discloses a vibration device in which the magnetic force generator [30] is located across from at least one of a lower side and an upper side of the weight [50].

It would have been obvious to one having ordinary skill in the art at the time the invention was made to change the location of the magnetic force generator as shown by

AAPA, since it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70.

Claim 32, Hiroyoshi et al. discloses the vibration device according to claim 31, except that the at least one elastic unit is contacted and supported with the lower case. It would have been obvious to one having ordinary skill in the art at the time the invention was made to exchange the shapes of the upper and lower cases [to construct the lower case in a C-shape with a flat upper case instead of the disclosed C-shaped upper case with a flat lower case], since it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70.

Claim 33, Hiroyoshi et al. discloses the vibration device according to claim 31, wherein the at least one elastic unit is contacted and supported with the upper case [figure 1].

Claim 34, Hiroyoshi et al. discloses the vibration device according to claim 31, further comprising a fixing member [210] configured to fix ends of the at least one elastic unit [figure 1].

Claim 35, Hiroyoshi et al. discloses the vibration device according to claim 31, wherein the at least one elastic unit includes a strip of a closed-curve shape and a plurality of support legs extended from the strip, and wherein the support legs form a downwardly turning curve in an axial direction of the strip [figures 3, 8 and 10-12].

Claim 36, Hiroyoshi et al. discloses the vibration device according to claim 35, wherein the strip has a polygonal or circular shape [figures 3, 8 and 10-12].

Claim 37, Hiroyoshi et al. discloses the vibration device according to claim 31, wherein the at least one elastic unit is a coil spring of a circular or polygonal conical shape [figure 9].

Claim 38, Hiroyoshi et al. discloses the vibration device according to claim 31, wherein the magnet is formed on only one surface [the outer periphery] of the weight opposite to the magnetic force generating unit.

Claim 39, Hiroyoshi et al. discloses the vibration device according to claim 31, wherein the magnetic force generating unit is a coil [220].

Claim 40, Hiroyoshi et al. discloses the vibration device according to claim 31, wherein the at least one elastic unit includes two elastic units, and wherein elastic unit insert grooves [groove between 120 and 130] are formed on the upper and lower surfaces of the weight so that the at least two elastic units are inserted and fixed therein respectively.

Claim 41, Hiroyoshi et al. discloses the vibration device according claim 34, wherein the fixing member includes protrusions at upper and lower ends to be contacted with the upper and lower cases and a recess depressed at a center thereof, and wherein fixing grooves are formed in ends of the protrusions respectively so as to fix ends of the at least two elastic units [col. 9 lines 15-26].

Claim 42, Hiroyoshi et al. discloses the claimed vibration device with the exception of the at least one magnet includes at least two magnets are formed on both surfaces of the weight. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use two smaller magnets instead of one large

magnet, since it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art. *Nerwin v. Erlichman*, 168 USPQ 177, 179.

Claim 56, Hiroyoshi et al. discloses the claimed invention with the exception of the magnetic force generating unit being formed on the lower surface of the casing body.

AAPA discloses a vibration device in which the magnetic force generator [30] is located on the lower surface of the casing body.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to change the location of the magnetic force generator as shown by AAPA, since it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70.

Claim 57, Hiroyoshi et al. discloses the vibration device according to claim 31, except that the at least one elastic unit is contacted and supported with the lower surface of the casing body. It would have been obvious to one having ordinary skill in the art at the time the invention was made to exchange the shapes of the upper and lower cases [to construct the lower case in a C-shape with a flat upper case instead of the disclosed C-shaped upper case with a flat lower case], since it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70.

Allowable Subject Matter

Claim 49 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bernard Rojas whose telephone number is (571) 272-1998. The examiner can normally be reached on M and W-F, 5:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin G. Enad can be reached on (571) 272-1990. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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